

ABSTRACT

The present invention aims to produce high-quality recycled pulp with little damage to fibers, high
5 brightness and low residual ink by means of a force selectively acting on fiber surfaces during the process of recycling waste paper. Moreover, fiber surfaces are modified by means of a force acting on only the fiber surfaces to obtain high-quality pulp and to render
10 harmless dirt deteriorating pulp quality.

A method for producing recycled pulp characterized in that cavitation is generated and used to strip contaminants deposited on fibers and ash during the process of recycling waste paper. Contaminants such as
15 ink deposited on fibers and ash are stripped/fragmented by means of the impact force induced by collapse of fine bubbles by actively introducing bubbles generated by cavitation into a pulp suspension. A jet system having one or more nozzles for jetting an aqueous slurry
20 containing a material comprising cellulose into a vessel.